



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,724	01/07/2004	Stefano Oggioni	FR920010058US1	1723
32074	7590	08/08/2005	EXAMINER	
INTERNATIONAL BUSINESS MACHINES CORPORATION DEPT. 18G BLDG. 300-482 2070 ROUTE 52 HOPEWELL JUNCTION, NY 12533			EDMONDSON, LYNNE RENEE	
			ART UNIT	PAPER NUMBER
			1725	
DATE MAILED: 08/08/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,724

Applicant(s)

OGGIONI, STEFANO

Examiner

Lynne Edmondson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/31/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/11/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 2, 3, 6 and 7 is withdrawn in view of the newly discovered reference(s) to the instant composition. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6-9, 13-15 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Crowell Jr. et al. (USPN 3461073).

Crowell teaches a paste for protection comprising up to 10% of a salt, up to 10% of a densifier, glycol and a colloid (gum arabic) (col 2 lines 1-53).

4. Claims 1-3, 6-8, 13-15, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Parhar (USPN 6752309 B1).

Parhar teaches a paste for protection comprising up to 20% a salt (col 4 lines 6-20), up to 10% of a densifier (col 2 lines 1-14), glycol and a colloid (wax) (col 1 lines 45-53).

5. Claims 1-9 and 13-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Caton (US 2004/0234701 A1).

Caton teaches a paste for protecting circuits (paragraph 9) comprising up to 60% a salt (paragraphs 11 and 16), sodium or potassium citrate (paragraph 68), glycerol (paragraph 50) and up to 20% of a colloid such as acacia (arabic) gum (paragraphs 58 and 72).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 10-15 and 21-23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Degani et al. (USPN 6043670) in view of Parhar (USPN 6752309 B1).

Degani teaches a paste for protecting which include mounted chips (col 2 lines 25-53 and col 4 lines 13-35) comprising a salt, glycerol and a densifier, gum (col 3 line

47 – col 4 line 8). The paste is printed (col 4 lines 13-15). However there is no disclosure of a wire bond. Neither are paste components further disclosed.

Parhar teaches a paste for protection comprising up to 20% a salt (col 4 lines 6-20), up to 10% of a densifier (col 2 lines 1-14), glycol and a colloid (wax) (col 1 lines 45-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention that bump and ball bonds (col 2 lines 35-45) are obvious variations of wire bonds and that the presence or lack of a wire bond (which is not covered by the protective paste) does not further limit the paste composition. Wire bonding of chips is well known and conventional in the art.

8. Claims 10, 11, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caton (US 2004/0234701 A1) in view of Drzaic et al. (USPN 6842657 B1).

Caton teaches a paste for protecting circuits (paragraph 9) comprising up to 60% a salt (paragraphs 11 and 16), sodium or potassium citrate (paragraph 68), glycerol (paragraph 50) and up to 20% of a colloid such as acacia (arabic) gum (paragraphs 58 and 72). However there is no disclosure of printing or of a wire bond.

Drzaic teaches a paste for protecting circuits (col 2 lines 50-56) comprising a salt (col 15 lines 1-33), glycerol and a colloidal densifier, acacia (col 15 lines 34-41 and col 15 line 57 – col 16 line 8). The paste is printed (col 8 lines 14-38)..

Art Unit: 1725

It would have been obvious to one of ordinary skill in the art at the time of the invention to print the paste as is conventional in the art to protect the circuit in a simple and cost-effective manner (Caton, paragraph 9).

Response to Arguments

9. Applicant's arguments with respect to claims 2, 3, 6, 7 and 9-12 have been considered but are moot in view of the new ground(s) of rejection.

10. Regarding applicant's argument that Caton does not teach either singly in combination applicant's invention as set forth in claim 1 or claim 11 see rejection as stated above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Saba (USPN 3448512, colloid, printing), Rolker et al. (USPN 3900320), Poliak et al. (USPN 3730782) and Brown (USPN 2798053).

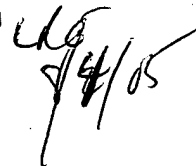
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

Art Unit: 1725

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson
Primary Examiner
Art Unit 1725



LRE